

CORPORATE-TO-BANK CONNECTIVITY: EMBEDDED FINANCE FOR TRANSACTION BANKING

Patricia Hines, CTP

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EXECUTIVE SUMMARY

In November 2018, Celent published its first report on unattended, automated corporate digital channels, [Corporate-to-Bank Integration: The Need for a Hybrid Approach](#). The 2018 report focused on host-to-host, file-based connectivity, a critical component of the corporate digital channels mix because it securely, reliably, and efficiently handles large, complex information flows across multiple banks and financial counterparties.

Jumping forward to 2022, Celent research confirms that corporate digital platforms and delivery channels continue to be top priorities for bank investment. But it isn't enough to offer siloed, stand-alone solutions. It is vital for banks to deliver an omnichannel digital customer experience, defined as "delivering a customized but consistent financial institution brand experience to customers across all channels and points of interaction."

The most significant addition to the mix of corporate digital channels is open banking APIs that enable real-time, unattended connectivity between financial institutions and third parties. Our latest research on API-based corporate-to-bank connectivity highlights APIs as a new connectivity channel for bank clients, enabling real-time, embedded, and automated data flows between corporate clients and their banks. But the report also reiterates the increasingly hybrid world of corporate digital channels, in which banks must continue to offer a full range of attended and unattended digital channels tailored to a corporate's specific business processes.

Most corporate treasury departments use more than one channel to connect with their banks. Each connectivity channel has unique advantages, which often leads corporate treasurers and finance teams to use a variety of channels. For example, they use web portals to approve payment batches submitted using APIs, host-to-host to aggregate balance and transaction data, and Swift to initiate large-value cross-border payment messages. With an increasing demand for cross-channel value-added services and use cases, omnichannel transparency and visibility become more critical.

Both banks and their corporate clients face rising complexity in the corporate-to-bank connectivity space. Growing cross-border payment volumes, migrating message formats, expanding file sizes, continuing integration challenges, and increasing demand for digitalization are driving increased attention on (and investment in) unattended digital channels.

Banks are well-positioned to overcome the rising complexity and increasing challenges in the corporate-to-bank connectivity and integration space, especially leveraging third party specialists. Employing outsourced, managed services allows banks to take an incremental approach to addressing integration challenges by starting with smaller pieces, such as onboarding one or two large corporates requiring file transformation and translation, and then growing the scope of adoption across the larger customer base. An incremental approach is also more manageable, compared to lifting and shifting large pieces of operations, in terms of financial and integration resource requirements.

The end goal of solving (or mitigating) complexity is fully automated, straight-through processing (STP) of banking data and payment initiation within ERP, TMS, and accounting software, whether through the file channel or via APIs. Under Celent's Embedded Finance framework, this STP falls into Tech-Led Embedded Finance, defined as making it easier to integrate bank standard products into the partner's digital experience.

Unfortunately, legacy systems, siloed technology teams, continued integration challenges, and fragmented operational support continue to be barriers on the path to embedded finance with seamless corporate-to-bank connectivity, for both banks and their corporate clients.

Faced with the impending ISO 20022 migration, disparate file formats, increasing file sizes, and client dissatisfaction, Celent encourages banks to take a hard look at their unattended connectivity channels—host-to-host, Swift, domestic networks, and APIs—to ensure that they can meet (and hopefully exceed) client expectations in an increasingly complex space. In addition, the ability to lean on the expertise of specialist providers can help ensure that banks are ready to take on the challenge.

CONTEXT

Celent has long researched corporate banking digital channels, the connection points for business clients to access bank products and services. In November 2018, Celent published its first report on unattended, automated corporate digital channels, *Corporate-to-Bank Integration: The Need for a Hybrid Approach*. This report focused on host-to-host, file-based connectivity, a critical component of the corporate digital channels mix because it securely, reliably, and efficiently handles large, complex information flows across multiple banks and financial counterparties.

Since then, we have published several more reports on corporate digital channels; you can find a complete list on page 23. Our latest report on corporate-to-bank connectivity highlights APIs as a new connectivity channel for bank clients, enabling real-time, embedded, and automated data flows between corporates and their banks. But the report also reiterates the increasingly hybrid world of corporate digital channels, in which banks must continue to offer a full range of attended and unattended digital channels tailored to a corporate's specific business processes.

APIs are front and center in our conversations with banks and solution providers. Clients often ask whether increasing API usage will decrease web portal usage, new host-to-host connections, and transaction volumes. These questions prompted us to revisit a report we published in November 2018.

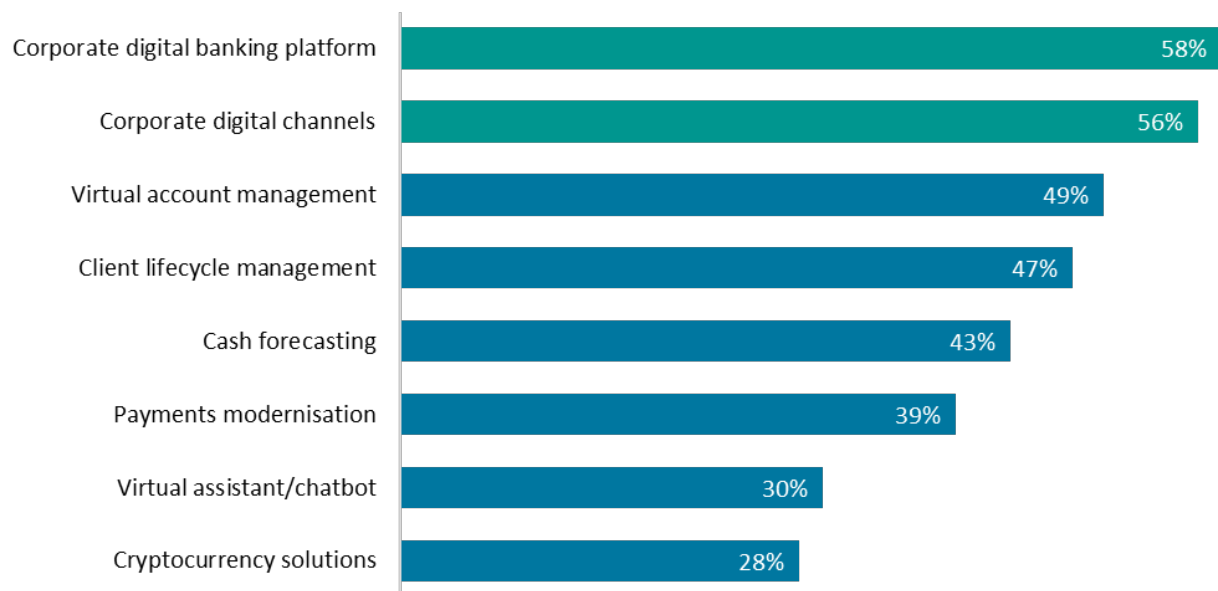
The 2018 report found that unattended connectivity channels such as host-to-host file integration and Swift network connectivity were critical to attracting multinational and large corporate clients, some of which work with 50 or more banks and manage 150 or more bank accounts.

Five years later, Celent reexamines the need for a hybrid approach to corporate-to-bank connectivity.

INTRODUCTION

When it comes to product-level investments, the biggest single investment priority for Corporate Banking is digital, encompassing both corporate digital banking platforms and corporate digital channels. These two solution areas were ranked first or second (or both) in every geographic region that Celent surveyed in its recently revamped Celent Banking IT Strategy Survey, with our analysis discussed in *IT Strategy and Priorities in Corporate Banking, 2022: Accelerating Away from the Pandemic* (Figure 1).

Figure 1: Corporate Banking Investment Priorities for 2022: Digital Leads the Way



Base: Corporate/wholesale banks and lines of business (sample: 182)

Source: Celent Banking IT Strategy Survey 2021/22

Zeroing in on corporate digital channels, Celent believes that it is vital that banks deliver an omnichannel digital customer experience, but the term means different things to different people. Based on our research, “omnichannel is about delivering a customized but consistent financial institution brand experience to customers across all channels and points of interaction.”

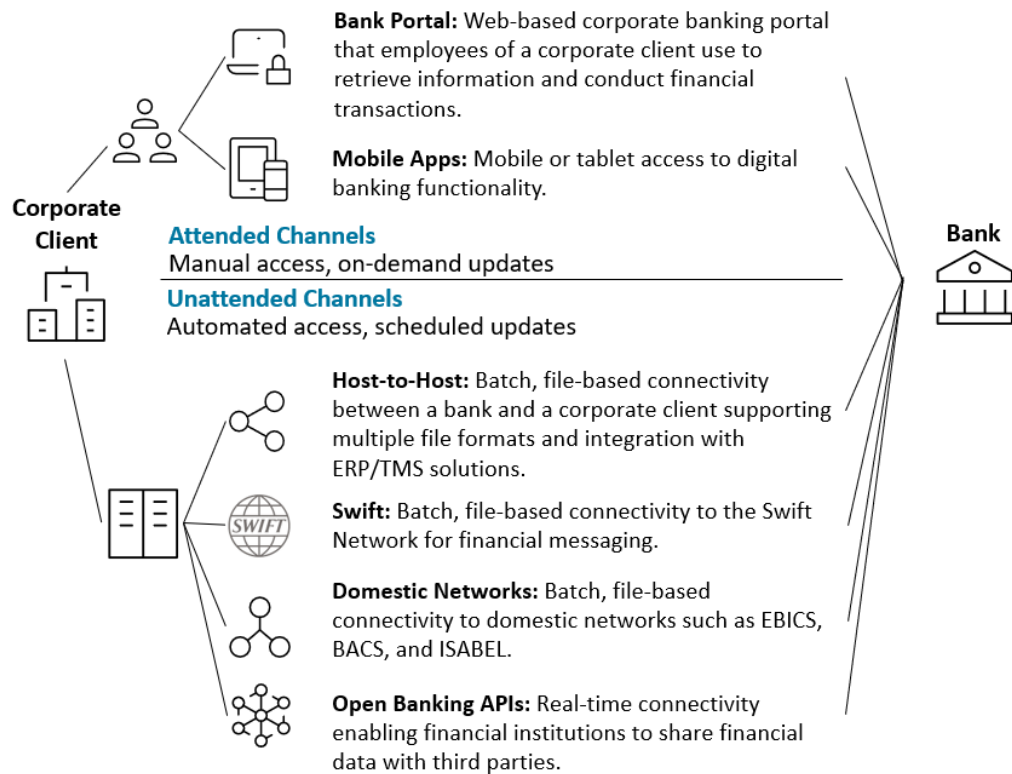
An omnichannel experience is even more critical when delivering services to corporate clients. Each client has a unique set of business and technology requirements based on their corporate treasury organizational structure, geographic footprint, and treasury technology sophistication. A consistent financial institution

brand experience is essential to corporate clients, and banks must adjust the customer experience to each client segment’s unique needs. An even more bespoke and customized experience is critical for the largest, most complex organizations.

Corporate-to-bank channel connectivity is a critical enabler for businesses of all sizes as they expand globally and increase the number of banks and accounts needed to conduct business. In addition, corporate channels act as the digital backbone for corporate clients to retrieve transaction information, initiate payments, collect receivables, perform reconciliations, and conduct other financial transactions.

Celent distinguishes between two types of digital channels, attended and unattended. With an attended channel, such as a web-based bank portal, mobile app, or tablet app, a business owner or employee logs in to access bank data or initiate payments. Unattended channels allow firms to access bank data or initiate payments in an automated fashion without manual intervention (Figure 2).

Figure 2: Attended versus Unattended Corporate-to-Bank Delivery Channels



Source: Celent analysis

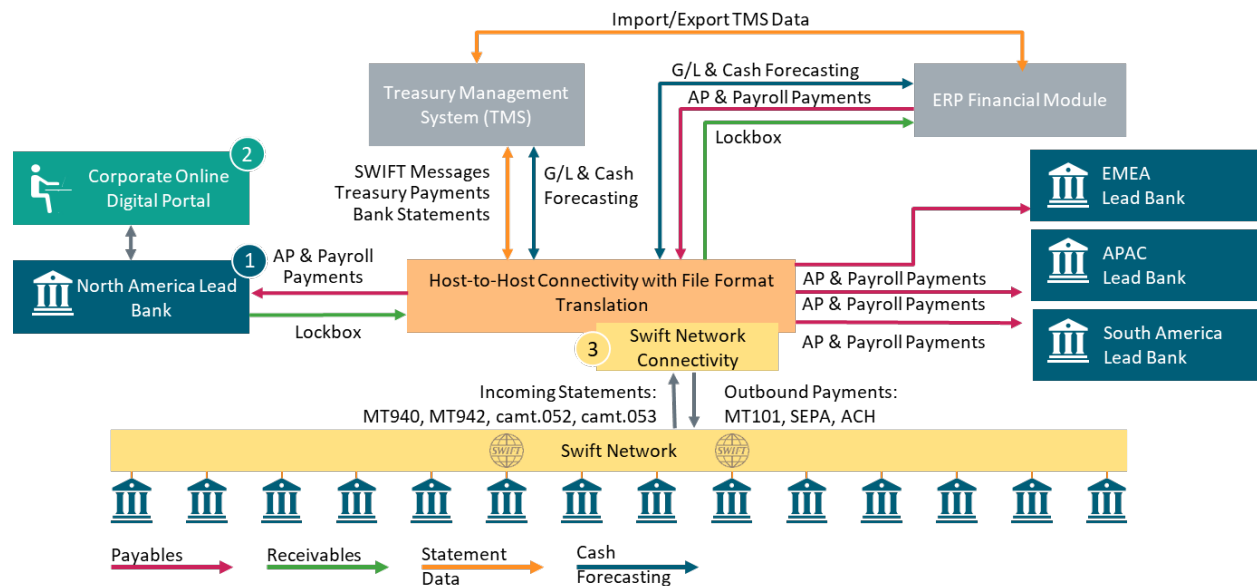
The addition of open banking APIs is a significant update to the graphic from the 2018 report.

Hybrid Connectivity

Most corporate treasury departments use more than one channel to connect with their banks. For example, looking at Figure 3, a large corporate customer may choose:

- 1 Direct file channel connectivity with its primary cash management banks in one or more geographies
- 2 Its bank's online digital portal for one-off, real-time wire payments
- 3 Swift network connectivity to reach several international banks for vendor and payroll payments

Figure 3: An Increasingly Complex Treasury Technology Landscape



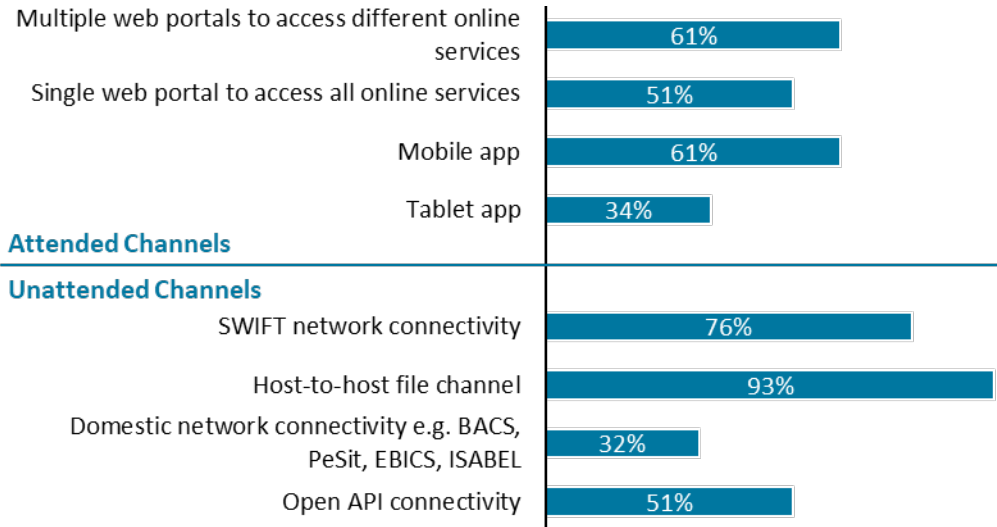
Source: Celent analysis

Celent's *Playing the Long Game to Enhance Client Engagement: 2020 Corporate Digital Channels Survey Results* report demonstrated that many banks do, in fact, offer a full range of digital channels (Figure 4).

Figure 4: Many Banks Offer the Full Range of Both Attended and Unattended Channels

Q: What delivery channels do you provide to corporate clients to access your transaction services, e.g., cash management, payables, receivables, trade services, and supply chain finance? (Select all that apply)

Percentage of Respondents



N = 41

Source: Celent Corporate Digital Channels Survey, July 2020

Given the smaller size of some responding banks, it is surprising that a large majority (93%) offer a host-to-host file channel along with Swift network connectivity, both generally viewed as offerings for more sophisticated clients.

RISING COMPLEXITY: VOLUMES, FORMATS, FILE SIZES, AND CONTINUED CLIENT CHALLENGES

Both banks and their corporate clients face rising complexity in the corporate-to-bank connectivity space. Growing cross-border payment volumes, migrating message formats, expanding file sizes, continuing integration challenges, and increasing demand for digitalization are driving increased attention on (and investment in) unattended digital channels.

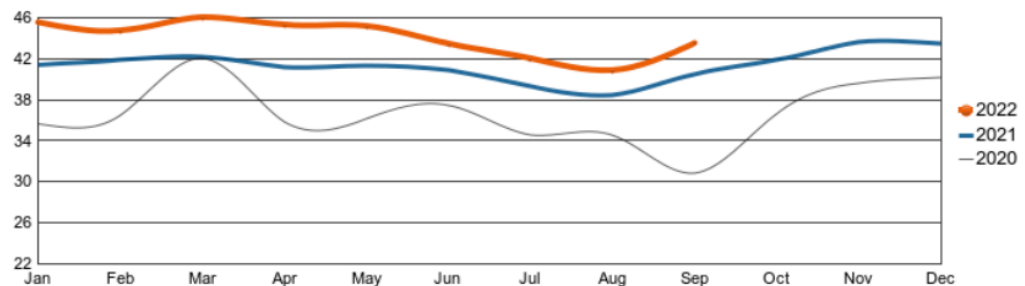
Growing Cross-Border Payment Volumes

The International Chamber of Commerce (ICC) expects global trade revenues to grow 5.8% annually and reach \$97 billion by 2031, an increase of \$42 billion from 2021).¹ The growing number of trade transactions, along with shifting market demand for B2B platforms, marketplaces, and embedded finance, is driving a 5% annual growth rate in cross-border payment flows. As a result, business-to-business (B2B) payments dominate cross-border market share and are estimated to total \$156 trillion in 2022.²

The continued growth in Swift payments illustrates this growth in B2B payments. For example, looking at Swift FIN payment message traffic, we see continued year-over-year growth over the past three years (Figure 5).

Figure 5: Swift FIN Traffic – Payments

Expressed in million messages (average daily traffic volumes per month)



Source: Swift FIN Traffic and Figures, Swift.com, accessed October 30, 2022

¹ ICC Trade Register Report: Global Risks in Trade Finance, International Chamber of Commerce, 2022

² How New Entrants Are Redefining Cross-Border Payments, Florian Seeh, EY-Parthenon Financial Services GmbH, February 2021

Migrating Message and Payment Formats



The nice thing about standards is that there are so many of them to choose from.”

Andrew S. Tanenbaum³

Celent has long hailed the ISO 20022 standard and its potential to harmonize financial messaging across payments, trade services, securities, cards, and foreign exchange. In the 2015 report, *ISO20022 — The Payments Revolution* (April 2015), Celent wrote that ISO 20022 was redefining the payments landscape. For corporate-to-bank integration, we predicted that, given the overall move to standardization, there would tend to be fewer technical issues, such as the need to convert formats, coupled with the fact that fewer formats and standards will need to be supported over time. In addition, this standardization has significant benefits in terms of time to market and costs associated with testing.

Fast forward seven years, and banks worldwide are grappling with the mandatory migration to ISO 20022 (MX) for cross-border payments and reporting (CBPR+) with a coexistence period with MT messages until November 2025.

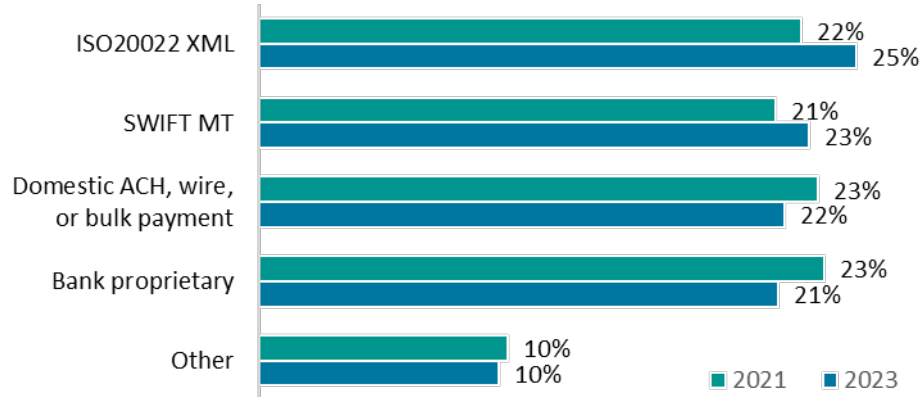
ISO 20022’s most often quoted benefit for corporates is the ability to carry extended remittance data for payment reconciliation. In theory, an ISO 20022 message can carry extensive, structured remittance data, allowing corporates to facilitate auto-reconciliation of both receivables and payables. Yet the reality is that unless every process in the payment chain can handle the ISO 20022 format and extended information, the message will be truncated, losing valuable remittance data.

Some banks might require their corporate clients to become fully ISO 20022 compliant by the 2025 deadline, including upgrading to the newest version of the ISO standard (version 9). But looking at payment format data paints a picture of corporates planning to stick with their current formats (Figure 6).

³The Quotations Page, www.quotationspage.com.

Figure 6: Corporates Will Continue to Use a Mix of Payment Formats

What proportion of your outgoing payments are initiated in each of the following formats? Please provide a view for today, and what you expect the picture to be in 2023.



Source: Celent Corporate Bank Payments Data Monetisation Survey, 2021, n=217

Looking at the change from 2021, Celent's payments data survey found that corporates expect to increase the use of ISO 20022 by 10% but also expect to increase the use of the Swift MT format by 7%.

Expanding Message and File Sizes

As payments and other financial messages shift from older Swift MT formats to ISO 20022 XML, file sizes increase simply due to the differences in file layouts and richness of XML data. For example, Figure 7 compares the older MT 101-Request for Transfer file layout against the newer, ISO-based pain.001-Customer Credit Transfer file layout.

Figure 7: Comparing Swift MT 101 to pain.001

Status	Tag	Field Name	Content/ Options	No.
MT 101 - Request for Transfer				
Mandatory Sequence A General Information				
M	20	Sender's Reference	16x	1
O	21R	Customer Specified Reference	16x	2
M	28D	Message Index/Total	5n/5n	3
O	50a	Instruction Party	C or L	4
O	50a	Ordering Customer	F, G, or H	5
O	52a	Account Servicing	A or C	6
O	51A	Sending Institution	[/11a]/[34x]4/a2/a2c/[3c]	7
M	30	Requested Execution Date	6n	8
O	25	Authorisation	35x	9
End of Sequence A General Information				
Mandatory Repetitive Sequence B Transaction Details				
M	21	Transaction Reference	16x	10
O	21F	FIX Deal Reference	16x	11
O	23E	Instruction Code	4/cj/30x	12
M	32B	Currency/Transaction Amount	3/a15d	13
O	50a	Instruction Party	C or L	14
O	50a	Ordering Customer	F, G, or H	15
O	52a	Account Servicing	A or C	16
O	56a	Intermediary	A, C, or D	17
O	57a	Account With Institution	A, C, or D	18
M	59a	Beneficiary	No letter option, A, or F	19
O	70	Remittance Information	4*35x	20
O	77B	Regulatory Reporting	3*35x	21
O	33B	Currency/Original Ordered Amount	3/a15d	22
M	71A	Details of Charges	3/a	23
O	25A	Charges Account	/34x	24
O	36	Exchange Rate	12d	25
End of Sequence B Transaction Details				
M = Mandatory, O = Optional - Network Validated Rules may apply				

Or	MessageElement/BuildingBlock<XML Tag>	Mult.	Type
	Message root <Document> <CstmCdtTrfIntr>	[1..1]	
	GroupHeader <GrpHdr>	[1..1]	
	MessageIdentification <MsgId>	[1..1]	Text
	CreationDateTime <CreDtTm>	[1..1]	DateTime
	Authorisation <Authstn>	[0..2]	±
	NumberOfTransactions <NbOfTx>	[1..1]	Text
	ControlSum <CtrlSum>	[0..1]	Quantity
	InitiatingParty <InitgPty>	[1..1]	±
	ForwardingAgent <FwdgAg>	[0..1]	±
	PaymentInformation <PmtInf>	[1..*]	±
	PaymentInformationIdentification <PmtInfId>	[1..1]	Text
	PaymentMethod <PmtMtd>	[1..1]	CodeSet
	BatchBooking <BtchBookg>	[0..1]	Indicator
	NumberOfTransactions <NbOfTx>	[0..1]	Text
	ControlSum <CtrlSum>	[0..1]	Quantity
	PaymentTypeInformation <PmtTpInf>	[0..1]	±
	RequestedExecutionDate <ReqdExctnDt>	[1..1]	±
	PoolingAdjustmentDate <PoolgAdjstmntDt>	[0..1]	Date
	Debtor <Dbtr>	[1..1]	±
	DebtorAccount <DbtrAcct>	[1..1]	±
	DebtorAgent <DbtrAg>	[1..1]	±
	DebtorAgentAccount <DbtrAgAcct>	[0..1]	±
	InstructionForDebtorAgent <InstrForDbtrAg>	[0..1]	Text
Or	MessageElement/BuildingBlock<XML Tag>	Mult.	Type
	UltimateDebtor <UltmtDbtr>	[0..1]	±
	ChargeBearer <ChrgBr>	[0..1]	CodeSet
	ChargesAccount <ChrgsAcct>	[0..1]	±
	ChargesAccountAgent <ChrgsAcctAg>	[0..1]	±
	CreditTransferTransactionInformation <CdtTrfTxInf>	[1..*]	±
	PaymentIdentification <PmtId>	[1..1]	±
	PaymentTypeInformation <PmtTpInf>	[0..1]	±
	Amount <Amt>	[1..1]	±
	ExchangeRateInformation <XchgRateInf>	[0..1]	±
	ChargeBearer <ChrgBr>	[0..1]	CodeSet
	ChequeInstruction <ChqInstr>	[0..1]	±
	UltimateDebtor <UltmtDbtr>	[0..1]	±
	IntermediaryAgent1 <IntrmyAg1>	[0..1]	±
	IntermediaryAgent1Account <IntrmyAg1Acct>	[0..1]	±
	IntermediaryAgent2 <IntrmyAg2>	[0..1]	±
	IntermediaryAgent2Account <IntrmyAg2Acct>	[0..1]	±
	IntermediaryAgent3 <IntrmyAg3>	[0..1]	±
	IntermediaryAgent3Account <IntrmyAg3Acct>	[0..1]	±
	CreditorAgent <CdrAg>	[0..1]	±
	CreditorAgentAccount <CdrAgAcct>	[0..1]	±
	Creditor <Cdr>	[0..1]	±
	CreditorAccount <CdrAcct>	[0..1]	±
	UltimateCreditor <UltmtCdr>	[0..1]	±
	InstructionForCreditorAgent <InstrForCdrAg>	[0..*]	±
	InstructionForDebtorAgent <InstrForDbtrAg>	[0..1]	Text
	Purpose <Purp>	[0..1]	±
	RegulatoryReporting <RgltryRptg>	[0..10]	±
	Tax <Tax>	[0..1]	±
Or	MessageElement/BuildingBlock<XML Tag>	Mult.	Type
	RelatedRemittanceInformation <RltdRmtInf>	[0..10]	±
	RemittanceInformation <RmtInf>	[0..1]	±
	SupplementaryData <SplmtryData>	[0..*]	±
	SupplementaryData <SplmtryData>	[0..*]	±

Source: Category 1 Standards, Swift User Handbook and ISO 20022 Payments Initiation Message Definition, ISO 20022, Celent analysis

According to message transformation firm Trace Financial, the bare minimum file size for MT 101 is seven fields in Block 4, with a total file size of approximately 209 bytes. The bare minimum for pain.001, on the other hand, is 11 fields with a total file size of 1301 bytes. The pain.001 file sizes grow quickly if you populate all the fields in the file, resulting in about 600 fields and a file size of 78,633 bytes. In addition, both message types (MT 101 and pain.001) have been enriched to support the Swift gpi Unique End-to-End Transaction Reference (UETR), enabling corporates to generate UETR tracking information directly in their treasury and payment systems.

Continuing Integration Challenges

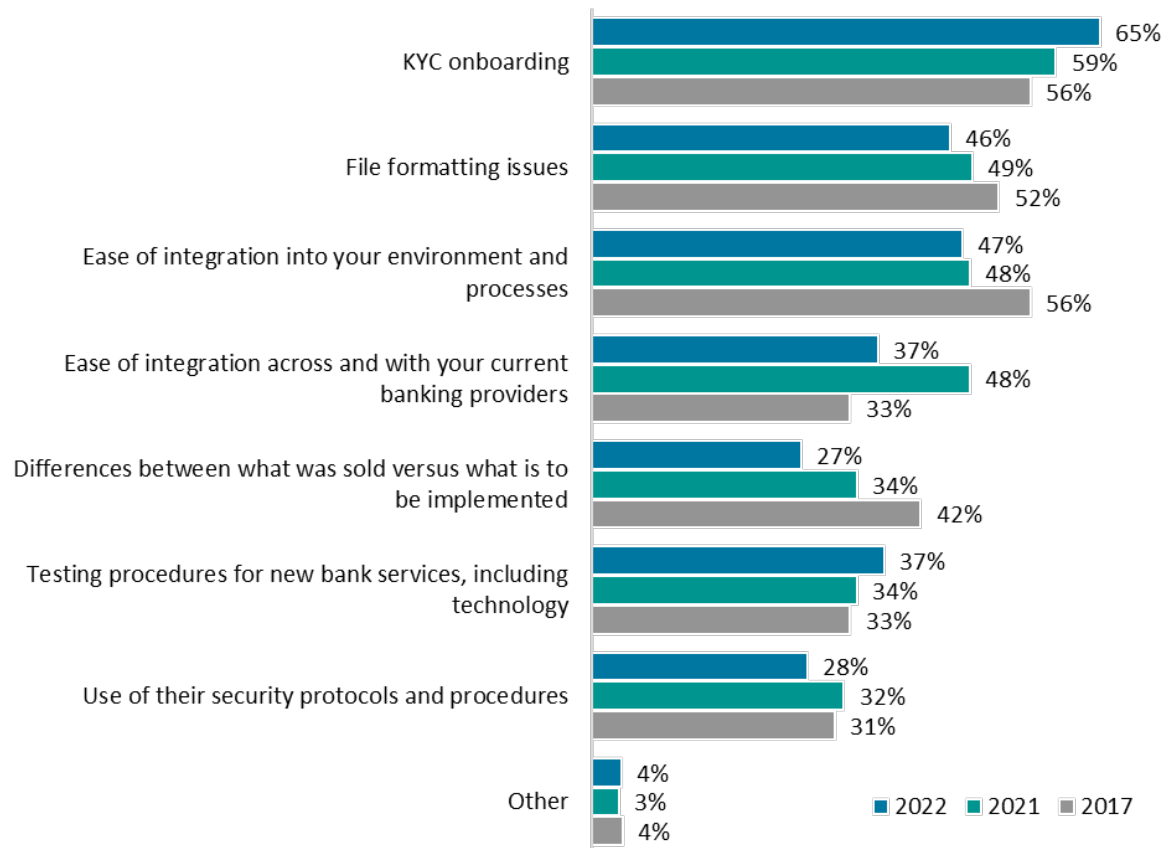
In our 2018 report, we discussed unresolved implementation and integration challenges, especially for corporates moving to a new banking provider. Indeed, this

is such an issue for many bank clients that the CGI Transaction Banking Survey 2022⁴ found that such challenges present a significant enough hurdle for them to remain with the bank providers they currently use.

As shown in Figure 8, KYC onboarding remains the leading issue for treasurers, given how long the process can take. Closely behind, file formatting issues are a serious problem for more than half of respondents, followed by those who suggested they would look to an easy environmental and process integration, an issue with less than half of our respondents. Technical and KYC onboarding challenges remain high on the integration challenges list for corporates. Banks must improve their integration, testing, and translation capabilities if they hope to retain existing clients and attract new ones.

Figure 8: Corporate Clients Continue to Face a Variety of Integration Challenges

Challenges Faced When Integrating with a Bank for Cash Management Services
(Percentage of Corporate Practitioners)



Source: CGI 2022/2021/2017 Transaction Banking Survey, The Global Treasurer and CGI

Another aspect of unattended channel integration where Celent sees substantial differences in approach is providing visibility through attended digital channels. At

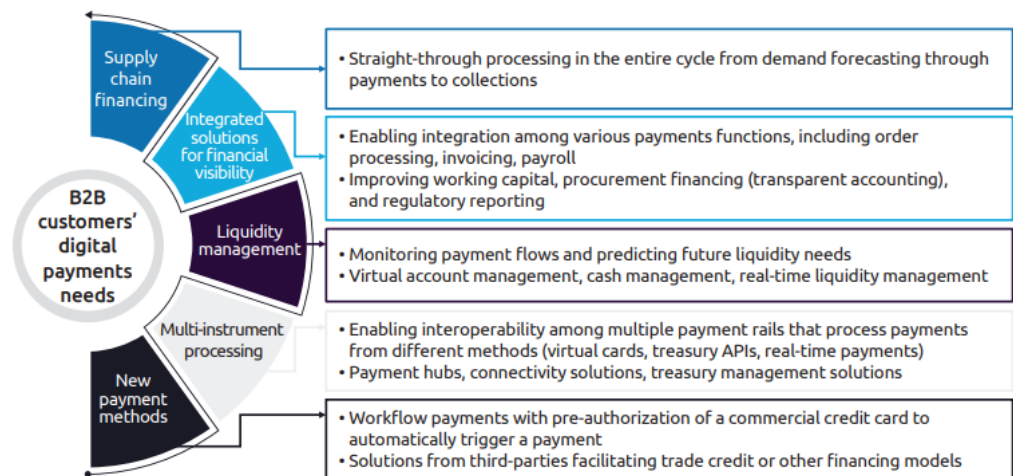
⁴ CGI Transaction Banking Survey 2022, The Global Treasurer and CGI, November 2022

most banks, there is no integration, thus no visibility, between these two categories of delivery channels.

Increasing Demand for Fast-Tracking Digitalization Initiatives

Challenged by the dramatic shift to work-from-home caused by the pandemic, commercial clients pushed their banks and payments providers to fast-track digitalization initiatives. Looking at the demand for end-to-end digital solutions from a payments perspective, business clients' digital payments needs evolved across several segments, as depicted in Capgemini's annual World Payments Report (Figure 9).

Figure 9: B2B Clients Develop a Hearty Appetite for End-to-End Digital Solutions



Source: [World Payments Report 2021](#), Capgemini Financial Services Analysis, October 2021

With best-in-class products and end-to-end digital solutions being critical drivers of bank relationships, how are banks responding? Unfortunately, outdated, fragmented, and siloed technology and other limitations in their current infrastructure, as well as siloed sales, operations, and technology teams, continue to be barriers on the journey to seamless corporate-to-bank integration, for both banks and their corporate clients.

OVERCOMING COMPLEXITY ON THE PATH TO EMBEDDED FINANCE

Although corporate practitioners reported some improvement in file formatting issues, ease of integration, and use of their security protocols in the CGI survey (Figure 8), they also reported degradation in KYC onboarding and testing procedures for new bank services. Banks are well-positioned to overcome the rising complexity and increasing challenges in the corporate-to-bank connectivity and integration space, especially leveraging third-party specialists.

File Format Translation

With banks and their corporate clients at different stages of ISO 20022 adoption during the coexistence period and still other clients choosing to stick with their current formats, the need for file format translation services will increase.

To continue to support clients with preferred file formats, third-party translation solutions can ease file formatting issues. In addition, these solutions offer drag-and-drop translation tools with the added bonus of regular map updates.

Ease of Integration

Another option that some banks employ to increase the ease of integration, manage rising volumes, and accelerate digitalization is outsourcing technical onboarding and ongoing unattended channel management to a third party provider. Outsourcing can benefit banks with varying volumes of integration and onboarding requests, those with limited technical resource availability, or those that need support for format translation to support format migration or to allow clients to use the format of their choice.

Outsourcing has traditionally been a significant cost reduction lever for banks providing unattended corporate-to-bank connectivity. Specialist providers manage both the technology and operations required to deliver a highly secure, reliable, and scalable service, leveraging the skills and expertise of integration experts.

In multitenant managed services, a group of firms outsources technology and operations to an external provider that offers the solution to multiple users using a shared pool of resources, with room for customization and configuration for every firm. This arrangement provides numerous benefits in addition to those seen in traditional outsourcing:

- Decreased unit cost through sharing common resources and greater economies of scale.
- Manifold increased scalability, and accelerated time to market, making market entry, expansion, and exit easier.
- Lessening of upfront investments and limited resource spending on maintaining and upgrading solutions for responding to regulatory changes.
- Reduction of redundant activities in the corporate-to-bank connectivity lifecycle that are not competitive differentiators, and yet are developed and managed by every bank, resulting in duplication of efforts and wasted resources.
- Improvement in the level of standardization while allowing room for customization for every user.
- Enablement of reliable, highly available platform and services, including 24x7 event monitoring.
- Introduction of overlay services, including customer onboarding, file format mapping and translation, data enrichment, end-to-end encryption, and sanctions checking.

Employing outsourced, managed services allows banks to take an incremental approach to addressing integration challenges by starting with smaller pieces, such as onboarding one or two large corporates requiring file transformation and translation, and then growing the scope of adoption across the larger customer base. An incremental approach is also more manageable in terms of financial and integration resources requirements, compared to lifting and shifting large pieces of operations.

EMBEDDED FINANCE FOR TRANSACTION BANKING



Celent defines embedded finance as the discovery and acquisition of tailored financial services products at the point of need within the digital experience curated by a non-bank third party.

Demystifying Embedded Finance: Promise and Peril for Banks, Celent

In Celent's 2021 report on *Demystifying Embedded Finance*⁵, the authors categorize "embedded finance as one of four **new** [emphasis added] models of how banks can participate in an increasingly open financial services ecosystem."

Under Celent's Embedded Finance engagement framework, fully automated, straight-through processing of banking data and payment initiation within ERP, TMS, and accounting software, whether through the file channel or via APIs, falls into the Tech-Led category. The category is defined as "making it easier to integrate bank standard products into the partner's digital experience."

But for transaction banking, market-leading banks like Citi have specialized in ERP integration since at least 2013, and the bank now offers CitiConnect ERP Integrator for both SAP and Oracle ERP Cloud.⁶ More recently, banks now realize that commercial clients using mid-tier ERP solutions like Oracle NetSuite, Microsoft Dynamics 365, and Sage Intacct also benefit from embedded banking and payments capabilities, which can enable them to work seamlessly and conveniently from within their treasury systems.⁷

A handful of banks have taken embedded finance for transaction banking the extra mile. These pacesetters have accomplished "true" omnichannel connectivity across all channels and points of interaction. They provide visibility of file/transaction status; file/transaction approval; and even exception management of transactions, batches, or entire files. This integration allows clients to have completely transparent bank interactions regardless of channel. It also provides additional security for those clients whose internal systems may not provide sufficient capability to approve transactions initiated in an unattended file. With an increasing reliance by corporate

⁵ [Demystifying Embedded Finance: Promise and Peril for Banks](#), Zilvanis Bareisis and Stephen Greer, Celent, April 2021

⁶ [CitiConnect](#)[®], accessed November 17, 2022

⁷ [PNC Integration and Digital Services](#), accessed November 17, 2022

corporate clients on initiating transactions through file-based and API-enabled channels, providing integrated online visibility and access for approval or exception management becomes an important differentiator.

A critical ingredient for integration between attended and unattended channels is the capability for the host-to-host file service to initiate and manage real time “events”—the ability to publish change notifications, react to these changes, and wait for instructions based on events. To achieve omnichannel transparency and interoperability, file channel events must be integrated into the bank’s digital channels (e.g., portal, mobile, tablet) or the corporate client’s TMS and ERP. Solutions such as hybrid/cloud integration act as mediators between channels, taking event messages from one channel and making them available to another.

How Embedded Banking Can Transform Corporate Treasury and Finance

The unexpected shift to work-from-home during the COVID-19 pandemic dramatically accelerated digital adoption and transformation, by both banks and their corporate clients. Many banks increased their adoption of APIs, microservices, and modular architectures, lowering operating costs while setting the stage to launch embedded finance and banking services.

APIs for integration connect disparate internal systems used by treasury and finance, along with third party data sources. This integration eliminates the repetitive process of logging in, exporting, importing, formatting, transferring, or rekeying data.⁸ Open banking APIs provide expedited access to cash positions and funds flows, streamlining cash forecasting.

But, more importantly, improved connectivity enables many different use cases for new and innovative, value-added services enabled by APIs, as discussed in [Creating Value-Added Services for Corporate Clients: Overcoming Barriers to Adopting APIs](#) (December 2019). These services can be developed and delivered on an accelerated timeline and often take advantage of solutions from fintechs to enhance current offerings.

Much of the initial focus of embedded banking for treasury and finance is on eliminating manual processes and paper documents, with a goal of fully automating receivables reconciliation and payables management. The addition of API connectivity with industry vertical software like Epic for healthcare, Yardi for property management, Intuit TurboTax for tax preparation, Guidewire for insurance, and Acorn for investment management broadens the depth and breadth of the benefits of embedded finance.

⁸ [How embedded banking can transform treasury](#), Wells Fargo Treasury Insights, accessed December 6, 2022

THE PATH FORWARD

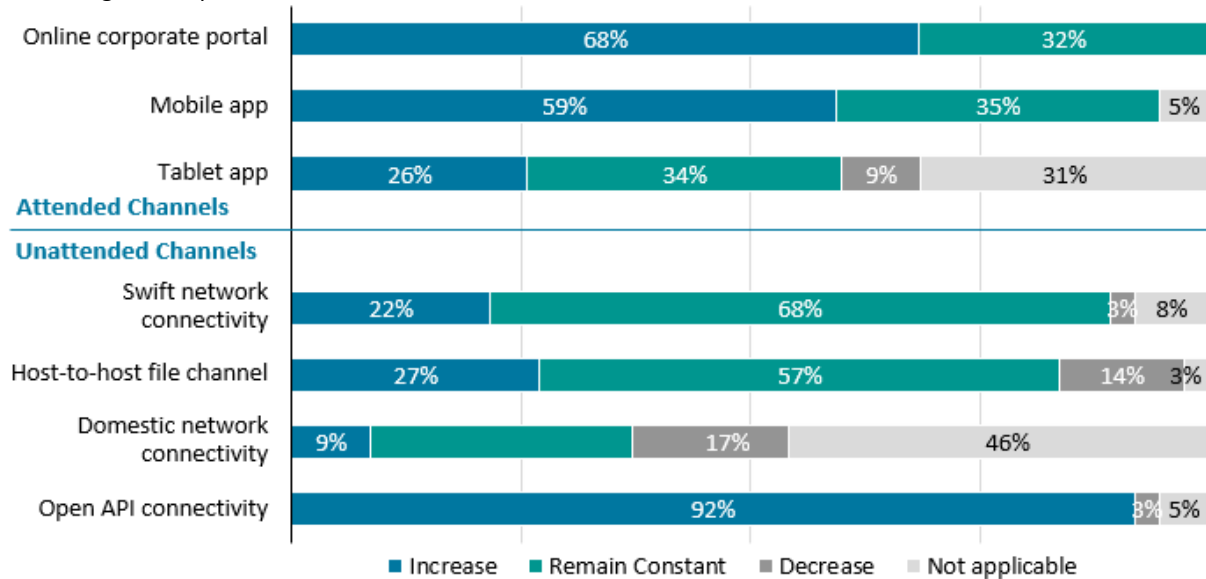
To cope with the increasingly complex corporate-to-bank connectivity and integration landscape, banks must offer a full range of attended and unattended digital channels tailored to a corporate’s specific business processes. Banks must also deliver an omnichannel digital experience for clients that meet each client’s unique business and technology requirements. While on the path to developing an embedded finance ecosystem for their clients, banks must ensure connectivity and integration obstacles are mitigated to drive continuous innovation in the future.

The good news is that corporate bankers continue to invest across attended and unattended channels. Although many already have solid unattended channel solutions, many continue to recognize the need to increase investments in APIs, host-to-host, and Swift channels (Figure 10).

Figure 10: Banks Continue to Increase Investment in Unattended Digital Channels

Thinking about your digital channel investment strategy over the next two years, do you expect investment to increase, decrease, or remain constant?

Percentage of Respondents



Source: Celent Corporate Digital Channels Survey, 2020, n=35-38 depending on channel

Unfortunately, legacy systems, siloed technology teams, continued integration challenges, and fragmented operational support continue to be barriers on the path to embedded finance with seamless corporate-to-bank connectivity, for both banks and their corporate clients.

Faced with the impending ISO 20022 migration, disparate file formats, increasing file sizes, and client dissatisfaction, Celent encourages banks to take a hard look at their unattended connectivity channels—host-to-host, Swift, domestic networks, and APIs—to ensure that they can meet (and hopefully exceed) client expectations in an increasingly complex space. In addition, the ability to lean on the expertise of specialist providers can help ensure that banks are ready to take on the challenge.

LEVERAGING CELENT'S EXPERTISE

If you found this report valuable, you might consider engaging with Celent for custom analysis and research. Our collective experience and the knowledge we gained while working on this report can help you streamline the creation, refinement, or execution of your strategies.

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Typical projects we support include:

Vendor short listing and selection. We perform discovery specific to you and your business to better understand your unique needs. We then create and administer a custom RFI to selected vendors to assist you in making rapid and accurate vendor choices.

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We provide services that help you refine your product and service offerings.

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For more information, please contact info@celent.com or:

Patricia Hines

phines@celent.com

Americas

USA

99 High Street, 32nd Floor
Boston, MA 02110-2320

[+1.617.424.3200](tel:+16174243200)

USA

1166 Avenue of the Americas
New York, NY 10036

[+1.212.345.8000](tel:+12123458000)

USA

Four Embarcadero Center
Suite 1100
San Francisco, CA 94111

[+1.415.743.7800](tel:+14157437800)

Brazil

Rua Arquiteto Olavo Redig
de Campos, 105
Edifício EZ Tower – Torre B – 26^º andar
04711-904 – São Paulo

[+55 11 3878 2000](tel:+551138782000)

EMEA

Switzerland

Tessinerplatz 5
Zurich 8027

[+41.44.5533.333](tel:+41445533333)

France

1 Rue Euler
Paris 75008

[+33 1 45 02 30 00](tel:+33145023000)

Italy

Galleria San Babila 4B
Milan 20122

[+39.02.305.771](tel:+3902305771)

United Kingdom

55 Baker Street
London W1U 8EW

[+44.20.7333.8333](tel:+442073338333)

Asia-Pacific

Japan

Midtown Tower 16F
9-7-1, Akasaka
Minato-ku, Tokyo 107-6216

[+81.3.6871.7008](tel:+81368717008)

Hong Kong

Unit 04, 9th Floor
Central Plaza
18 Harbour Road
Wanchai

[+852 2301 7500](tel:+85223017500)

Singapore

8 Marina View
Asia Square Tower 1
#09-07
Singapore 018960

[+65 6510 9700](tel:+6565109700)